



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,132	05/06/2004	David A. Giardino	CP-5165	7236

5409 7590 02/01/2007
SCHMEISER, OLSEN & WATTS
22 CENTURY HILL DRIVE
SUITE 302
LATHAM, NY 12110

EXAMINER

CHUKWURAH, NATHANIEL C

ART UNIT	PAPER NUMBER
----------	--------------

3721

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

58

Office Action Summary	Application No. 10/840,132	Applicant(s) GIARDINO, DAVID A.	
	Examiner Nathaniel C. Chukwurah	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on 10/18/2006.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandenburg (US 3,732,934) in view of Wallace et al. (US 3,951,217) further in view of Mitchaell et al. (US 2,727,598).

With regard to claim 1, the reference of Brandenburg discloses a control device (work control device, abstract) comprising a pressure regulator comprising a valve (62 check valve), and configured to limit a maximum pressure provided to the motor (10); a torque limiting timing device (restrictor 56) comprising at least one valve (28), configured and capable of shutting-off fluid flow to a motor (10) at a predetermined time by restricting the air flow to the motor (see col. 4, line 56), and in fluid communication with a pressure regulator (62 check valve); a reservoir (58)

Art Unit: 3721

in fluid communication with the pressure regulator (62 check valve); and a valve (40) which adjusts the reservoir thereby controlling the pressure and the timing device (restrictor).

The reference of Brandenburg teaches a work control mechanism as shown in Figure 1 including a torque limiting timing device (col. 4, line 31) being in fluid communication with a pressure regulator (valve 28) for turning off fluid supply to the motor.

The valve of the pressure regulator and the valve of the torque limiting timing device lack slidable movement and spring that bias the each valve respectively. However, the reference of Wallace et al. teaches pressure regulator (29) including a slidable valve (45) and a spring (46) which biases the valve. Further, the reference of Mitchell et al. teaches torque limiting timing device (46) including a slidable valve (29) and a spring (48) which causes the valve movement.

In view of the teaching of Wallace et al., it would have been obvious to one having skill in the art at the time the invention was made to incorporate the slidable valve and the spring the as taught by Wallace et al., into the pressure regulator of the control device of Brandenburg in order to provide advantage of biasing force of the spring over the diaphragm.

In view of the teaching of Mitchell et al., it would have been obvious to one having skill in the art at the time the invention was made to incorporate the slidable valve and the spring the as taught by Mitchell et al., into the torque limiting timing device of the control device of Brandenburg in order to provide advantage of biasing force of the spring over the diaphragm.

With regard to claim 2, the timing of the control device of Brandenburg includes user adjustable. See (manual restrictor 23).

With regard to claim 3, the control device of Brandenburg is capable of controlling a predetermined fixed time (see col. 1, lines 47-49).

With regard to claim 4, the modified pressure regulator of the control device of Brandenburg includes a valve (62).

With regard to claim 5, the modified torque limiting timing device of the control device of Brandenburg includes a shut-off valve (28).

With regard to claim 6, the control device of Brandenburg is releasably attachable to a tool (see Fig. 2).

With regard to claims 7 and 8, the control device of Brandenburg is modular and integral with the tool. See (col. 1, lines 19-21)

With regard to claim 9, the control device of Brandenburg is capable of being remote from the tool.

With regard to claim 13, the reference of Brandenburg discloses a control device (work control device, abstract) comprising a pressure regulator comprising a valve (62 check valve), and configured to limit a maximum pressure provided to the motor (10); a torque limiting timing device (restrictor 56) comprising at least one valve (28), configured and capable of shutting-off fluid flow to a motor (10) at a predetermined time by restricting the air flow to the motor (see col. 4, line 56), and in fluid communication with a pressure regulator (62 check valve); a reservoir (58) in fluid communication with the pressure regulator (62 check valve); and a valve (40) which adjusts the reservoir thereby controlling the pressure and the timing device (restrictor).

The reference of Brandenburg teaches a work control mechanism as shown in Figure 1 including a torque limiting timing device (col. 4, line 31) being in fluid communication with a pressure regulator (valve 28) for turning off fluid supply to the motor.

The valve of the pressure regulator and the valve of the torque limiting timing device lack slidable movement and spring that bias the each valve respectively. However, the reference of Wallace et al. teaches pressure regulator (29) including a slidable valve (45) and a spring (46) which biases the valve. Further, the reference of Mitchell et al. teaches torque limiting

Art Unit: 3721

timing device (46) including a slidable valve (29) and a spring (48) which causes the valve movement.

In view of the teaching of Wallace et al., it would have been obvious to one having skill in the art at the time the invention was made to incorporate the slidable valve and the spring the as taught by Wallace et al., into the pressure regulator of the control device of Brandenburg in order to provide advantage of biasing force of the spring over the diaphragm.

In view of the teaching of Mitchell et al., it would have been obvious to one having skill in the art at the time the invention was made to incorporate the slidable valve and the spring the as taught by Mitchell et al., into the torque limiting timing device of the control device of Brandenburg in order to provide advantage of biasing force of the spring over the diaphragm.

With regard to claim 14, an extension forming a chamber on the valve of the pressure regulator and the at least one valve chamber is disclosed by the reference of Wallace et al.

With regard to claim 15, the reference of Brandenburg an discloses intermediate channel (48, 54) between the pressure regulator valve and the torque limiting timing device valve.

With regard to claim 16, a passage within said pressure regulator valve.

With regard to claim 17, the timing of the control device of Brandenburg includes user adjustable. See (manual restrictor 23).

With regard to claim 18, the control device of Brandenburg is capable of controlling a predetermined fixed time (see col. 1, lines 47-49).

With regard to claim 19, the reference of Brandenburg discloses a control device (work control device, abstract) comprising a pressure regulator comprising a valve (62 check valve), and configured to limit a maximum pressure provided to the motor (10); a torque limiting timing device (restrictor 56) comprising at least one valve (28), configured and capable of shutting-off fluid flow to a motor (10) at a predetermined time by restricting the air flow to the motor (see col. 4, line 56), and in fluid communication with a pressure regulator (62 check valve); a reservoir (58) in fluid communication with the pressure regulator (62 check valve); and a valve (40) which adjusts the reservoir thereby controlling the pressure and the timing device (restrictor).

The reference of Brandenburg teaches a work control mechanism as shown in Figure 1 including a torque limiting timing device (col. 4, line 31)

being in fluid communication with a pressure regulator (valve 28) for turning off fluid supply to the motor.

The valve of the pressure regulator and the valve of the torque limiting timing device lack slidable movement and spring that bias the each valve respectively. However, the reference of Wallace et al. teaches pressure regulator (29) including a slidable valve (45) having a chamber and a spring (46) which biases the valve. Further, the reference of Mitchell et al. teaches torque limiting timing device (46) including a slidable valve (29) and a spring (48) which causes the valve movement.

In view of the teaching of Wallace et al., it would have been obvious to one having skill in the art at the time the invention was made to incorporate the slidable valve and the spring the as taught by Wallace et al., into the pressure regulator of the control device of Brandenburg in order to provide advantage of biasing force of the spring over the diaphragm.

In view of the teaching of Mitchell et al., it would have been obvious to one having skill in the art at the time the invention was made to incorporate the slidable valve and the spring the as taught by Mitchell et al., into the torque limiting timing device of the control device of Brandenburg in order to provide advantage of biasing force of the spring over the diaphragm.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandenburg in view of Wallace et al. and Mitchaell et al. and further in view of Clapp et al. (US 4,023,627).

With regard to claim 20, the modified control device of Brandenburg lacks a vent within the pressure regulator adjacent the biasing element.

However, the control device of Clapp et al. teaches a vent (36) within the pressure regulator adjacent the biasing element (27) for venting a portion the air so as to control the pressure the tool chamber.

In view of the teaching of the reference of Clapp et al., it would have been obvious to one having skill in the art at the time the invention was made to incorporate the vent adjacent the biasing element in order to delay rapid pressure build up in the tool chamber and minimize back pressure.

With regard to claim 21, the modified control device of Brandenburg a narrowed portion of the valve chamber, wherein the poppet portion of the valve body is slidingly received by the narrowed portion of the valve chamber when the valve body is in its biased position as disclosed in Wallace et al. (Fig. 9).

With regard to claim 22, the modified control device of Brandenburg includes a vent channel biased closed by the torque limiting timing device,

Art Unit: 3721

wherein the vent channel vents the reservoir as described in column 4, lines 31-39.

With regard to claim 23, the modified control device of Brandenburg includes a valve seat within a channel to the reservoir, wherein the metering device is a valve adjustably positionable within the valve seat to control a rate to fill the reservoir, wherein when the reservoir reaches a pressure sufficient to overcome the bias of the torque limiting timing device and shuts off the motor at a desired time as described in column 4, lines 31-57.

Response to Arguments

5. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

7. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the

Art Unit: 3721

THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Refer to attachment for notice of references cited and recommended for consideration based on their disclosure of limitations of the claimed invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathaniel C. Chukwurah whose telephone number is (571) 272-4457. The examiner can normally be reached on M-F 6:00AM-2:30PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3721

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NC

January 28, 2007.



Paul I. Rada
Supervisory Patent Examiner
Group 3700